PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty Docket No.: A01087B

In re application of: Ralph C. Even : Confirmation No. 9801

Serial No.: 10/040,170 Group Art Unit: 1713

Filed: October 22, 2001 : Examiner: Judy M. Reddick

For: Aqueous Acrylic Emulsion Polymer Composition

SECOND DECLARATION UNDER 37 C.F.R. §1.132

This declaration explains why the art cited by the Examiner in the September 7, 2004 Office Action does not apply to the invention claimed in this application.

The Declarant

(1) My name is Ralph C. Even, and I reside at 1424 Mauck Road, Blue Bell, PA 19422. I received my B.A. in Chemistry from Franklin and Marshall College in 1981. I am the named inventor on this application.

(2) I have been employed by Rohm and Haas Company since 1981, until recently as a Senior Chemist in Coatings Emulsion Polymer Synthesis. My primary job responsibility over that 17-year period was the design and practice of emulsion polymerization technology. During that time, I performed many emulsion polymerizations and had others perform emulsion polymerization under my direction, including emulsion polymerizations of the type described in Eichman U.S. 5,990,228.

The September 7, 2004 Office Action

(3) I reviewed this Office Action and understand that the Examiner rejected pending Claims 1-2 and 4-8 as unpatentable citing various examples in Eichman U.S.

5,990,228 where certain redox reactions are described. I believe that Eichman is inapplicable to my invention as I understand the pending claims in my application.

The Reasons Why Eichman Is Inapplicable

(4) The redox reactions in the examples of U.S. 5,990,228 ("Eichman") cited by the Examiner are limited to a procedure known to those in the art as "residual monomer reduction" This reduction involves the elimination of low levels of monomer that is left after the main polymerization is completed. In Eichman, that post-polymerization reduction is accomplished with a redox reaction.

(5) For example, in Eichman's Example 1, Column 4, Lines 39 through 59 describe the main polymerization which is accomplished through *thermal* initiation, the formation of radicals as a result of degradation of ammonium persulfate at elevated temperature. The addition of the redox initiator (made up of ferrous sulfate heptahydrate, EDTA solution, t-butyl hydroperoxide, and iso-ascorbic acid described in Column 4, Lines 60 through 64), occurs only after the main thermally initiated polymerization and constitutes simply a residual monomer reduction procedure. The only subsequent references to the use of redox initiators in the samples made in the subsequent examples 2 through 4 is the statement that each "was prepared following the same procedure as Sample 1" (see below) indicating that in each of the subsequent examples involved *thermal* main polymerizations followed by later redox residual monomer reductions.

Sample	Reference to Procedure of Example 1	Description of Main Polymerization
Example 2/ Sample 2	Column 5, Lines 30-31	Column 5, Lines 35-59
Example 2/ Sample 3	Column 5, Lines 62-63	Column 5, Lines 63-67 Column 6, Lines 1-31
Example 2/ Sample 4	Column 6, Lines 34-35	Column 6, Lines Line 35-66 Column 7, Lines 1-14
Example 2 – Sample 5	Column 7, Lines16-17	Column 7, Lines 17-59
Example 3 – Sample 6	Column 7, Lines 65-66	Column 7, Lines 66-67 Column 8, Lines 1-40

Example 3 – Sample 7	Column 8, Lines 43-44	Column 8, Lines 44-66 Column 9, Lines 1-24
Example 3 – Sample 8	Column 9, Lines 26-27	Column 9, Lines 27-66 Column 10, Lines 1-6
Example 3 – Sample 9	Column 10, Lines 9-10	Column 5, Lines 10- 54
Example 3 – Sample 10	Column 10, Lines 56-57	Column 10, Lines 57-67 Column 11, Lines 1-34
Example 4 – Sample 11	Column 11, Lines 39-40	Column 11, Lines 40-66 Column 12, Lines 1-22

(6) I have extensive experience with thermal polymerization processes as described in Eichman. After the main thermally initiated polymerization step described above is completed, commonly no more than 2% of the monomers remained to be subjected to a redox reaction for residual monomer reduction. Thus, no more than 2% of any polymer formed in Eichman's reactions scheme would be formed by the redox reactions performed in Eichman's monomer reduction steps.

(7) Thus, Eichman is inapplicable to my invention because my invention involves, among other things, forming at least 40% by weight of the polymer via a redox emulsion step, which is greater than 2% achievable by Eichman's redox scheme.

Statement Under 37 C.F.R. §1.68

(8) I declare that all statements made in this declaration of my own knowledge are true. I believe that all statements made herein on information and belief also are true. Furthermore, I understand that willful false statements and the like so made are punishable by fine or imprisonment, or both, under the United States Code, and such willful false statements may jeopardize the validity of any patent application or patent that may issue on this patent application.

Dated: October 22, 2004

Ralph C. Even